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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/644,946	08/19/2003	Ting-Fang Wang	03185-UPS	6792
33804	7590	10/11/2005	EXAMINER	
SUPREME PATENT SERVICES POST OFFICE BOX 2339 SARATOGA, CA 95070			BONK, TERESA	
			ART UNIT	PAPER NUMBER
			3725	

DATE MAILED: 10/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/644,946

Applicant(s)

WANG ET AL.

Examiner

Teresa M. Bonk

Art Unit

3725

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 2 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 August 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 1B0 and 1B3 in Figure 4 (h) and (i), respectively. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
3. Claims 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Baek in view of Yagi et al. or, in the alternative, Yagi in view of Baek. Baek discloses a method for shaping a seamless aluminum wheel rim by cutting an aluminum alloy plate into a circular plate (column 3, lines 41-42); the circular aluminum alloy plate being drawn into a cup-shaped embryo body by a deep drawing die (22 die; also See Figure 4), wherein an end of the embryo body is shaped into a cup-shaped cylinder (cup-shaped perform 28) and the other end thereof is an embryo expansion part (See Figure 3a and Figure 4); the bottom surface of the cup-shaped cylinder being punched out to form a hollow cylinder (seamless tube 20; Column 3, lines 62-67). Baek completes the shaping of the wheel rim by a rolling process.

Baek discloses the invention substantially as claimed except for the cup-shaped embryo being put into an expanding-pressing female die with an expanding die cavity respectively at both ends thereof, and then pressed and expanded by two sets of expanding-pressing male dies respectively at both ends of the embryo body to make the embryo expansion part and the hollow cylinder respectively form a first expansion part and a second expansion part that construct a wheel rim.

Yagi et al. discloses a method for shaping a wheel rim by putting the cup-shaped embryo (cylindrical body A) into an expanding-pressing female die with an expanding die cavity respectively at both ends (16a1 and 16a2 forming surfaces; also See Figure 3) thereof, and

then pressed and expanded by two sets of expanding-pressing male dies respectively at both ends of the embryo body (2 and 4 dies, 2a and 4a forming surfaces; also See Figure 3) to make the embryo expansion part and the hollow cylinder respectively form a first expansion part and a second expansion part that construct a wheel rim (H).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use Yagi et al.'s method of expanding instead of Baek's rolling process to finish constructing the wheel rim in order to improve its manufacturing efficiency (Column 2, lines 35-36).

4. In the alternative, Yagi et al. discloses a method for shaping a wheel rim by putting the cup-shaped embryo (cylindrical body A) into an expanding-pressing female die with an expanding die cavity respectively at both ends (16a1 and 16a2 forming surfaces; also See Figure 3) thereof, and then pressed and expanded by two sets of expanding-pressing male dies respectively at both ends of the embryo body (2 and 4 dies, 2a and 4a forming surfaces; also See Figure 3) to make the embryo expansion part and the hollow cylinder respectively form a first expansion part and a second expansion part that construct a wheel rim (H).

Yagi et al. discloses the invention substantially as claimed except for cutting an aluminum alloy plate into a circular plate; the circular aluminum alloy plate being drawn into a cup-shaped embryo body by a deep drawing die, wherein an end of the embryo body is shaped into a cup-shaped cylinder and the other end thereof is an embryo expansion part; the bottom surface of the cup-shaped cylinder being punched out to form a hollow cylinder.

Baek discloses a method for shaping a seamless aluminum wheel rim by cutting an aluminum alloy plate into a circular plate (column 3, lines 41-42); the circular aluminum alloy plate being drawn into a cup-shaped embryo body by a deep drawing die (22 die; also See

Figure 4), wherein an end of the embryo body is shaped into a cup-shaped cylinder (cup-shaped perform 28) and the other end thereof is an embryo expansion part (See Figure 3a and Figure 4); the bottom surface of the cup-shaped cylinder being punched out to form a hollow cylinder (seamless tube 20; Column 3, lines 62-67).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use Baek's method steps of cutting, punching, and deep drawing to form the cup-shaped embryo body (cup-shaped perform 28 in Baek; cylinder A in Yagi et al.) to be used in Yagi et al.'s method of expanding in order to produce a wheel rim (seamless tube) having an optimal thickness and high strength and quality by a flow forming process (Column 2, fourth paragraph, lines 26-30).

5. Claims 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Baek in view of Yagi et al. in further view of Hale, Jr. et al. The combination of Baek and Yagi et al. discloses the invention substantially as claimed except for the thickness of the aluminum alloy plate. Hale, Jr. et al teaches that is known to use aluminum with a thickness of 6 mm when making a wheel rim. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was make to use 6 mm aluminum, as taught by Hale Jr. et al, since he states at Column 5, lines 27- 31 that such a modification improves the wheel rim.


Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Teresa M. Bonk whose telephone number is (571) 272-1901. The examiner can normally be reached on M-F 7:30AM - 5PM with alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Derris Banks can be reached on (571) 272-4419. The fax phone number for the organization where this application or proceeding is assigned is 571-273-9900.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Teresa M. Bonk
Examiner
Art Unit 3725


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